

PERCENTAGE LOG OF WATER-WELL CUTTINGS
UTAH GEOLOGICAL SURVEY

DWRi Appropriation #: 07-57-001-M00
 Location: (D-4-1)4adc, Salt Lake County, Utah
 Driller: Zimmerman Drilling Services

Well Owner: Draper Irrigation Company
 Win #: 430976
 Geologist: Janae Wallace, 11/3/08

Depth Range (feet)		PERCENTAGES			COMMENTS
		uncon*	dis*	consolidated	
		gravel ⁺	crystals	igneous	
0	10	0	0	0	no sample
10	20	100	0	0	pale red-purple volcanic gravel/coarse sand with minor bull quartz; sample consists of feldspar, hornblende, biotite, and green minerals; angular; maximum clast size (MCS) is 0.8 cm, average clast size (ACS) is 0.3 cm; noncalcareous
20	30	100	0	0	" MCS is 0.35, ACS is 0.3 cm
30	40	100	0	0	" MCS is 1.2 cm, ACS is 0.3 cm; angular to rounded with minor quartzite clasts
40	50	100	0	0	" MCS is 0.8, ACS is 0.3 cm; minor quartzite and granodiorite clasts
50	60	100	0	0	pale gray-purple volcanic gravel/coarse sand (more uniform composition than above samples); sample consists of feldspar, hornblende, and biotite; MCS is 1 cm, ACS is 0.3 cm; noncalcareous
60	70	80	20	0	gray-purple volcanic and granodiorite clasts with clay and sand-sized/crystals of feldspar, hornblende, and biotite/ MCS is 1 cm, ACS is 0.3 cm; slightly calcareous; grus or fault gouge?

*uncon=unconsolidated; dis=disaggregated; ⁺ estimated clast size may not reflect actual size due to drill-bit action (includes coarse sand)

Depth Range (feet)		PERCENTAGES			COMMENTS
		uncon*	dis*	consolidated	
		gravel ⁺	crystals	igneous	
70	80	0	100	0	orange-red clay (altered?), silt, sand, disaggregated igneous fragments? Composed of feldspar, hornblende, and biotite; slightly calcareous; grus or fault gouge?
80	90	5	95	0	“ gray and pink; trace pyrite; MCS is 1 cm, ACS is 0.3 cm; grus or fault gouge?
90	100	20	80	0	“gray-brown and pink; trace bull quartz and quartzite; MCS is 1.2 cm, ACS is 0.5 cm; grus or fault gouge?
100	110	20	80	0	“gray-tan and pink; MCS is 1 cm, ACS is 0.3 cm; grus or fault gouge?
110	120	100	0	0	gray-purple angular volcanic clasts composed of feldspar, hornblende, and biotite with trace gray quartzite; MCS is 1 cm, ACS is 0.5 cm; slightly calcareous
120	130	0	10	90	altered gray, green, and pink-brown plutonic (granodiorite or monzogranite) rock composed of hornblende, feldspar, biotite, and quartz; trace green mineral and pyrite; slightly calcareous
130	140	0	10	90	“ epidote?; trace green foliated mineral; pyrite
140	150	0	0	100	“ trace breccia
150	160	0	0	100	“ trace chlorite?; hematite/ magnetite?
160	170	0	0	100	green and white-gray phaneritic plutonic rock composed of K-spar, quartz, biotite, chlorite; trace hematite and magnetite; trace epidote; noncalcareous; monzogranite?

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Depth Range (feet)		PERCENTAGES			COMMENTS
		uncon*	dis*	consolidated	
		gravel ⁺	crystals	igneous	
170	180	0	0	100	“
180	190	0	0	100	green and white-gray phaneritic plutonic rock composed of K-spar, quartz, biotite, and chlorite; trace epidote; noncalcareous; monzogranite?
190	200	0	0	100	“
200	210	0	0	100	“
210	220	0	0	100	“
220	230	0	0	100	“
230	240	0	0	100	“
240	250	0	0	100	“ gray and white
250	260	0	0	100	“ green and gray white
260	270	0	0	100	“
270	280	0	0	100	“
280	290	0	0	100	“
290	300	0	0	100	“
300	310	0	0	100	“
310	320	0	0	100	“
320	330	0	0	100	“
330	340	0	0	100	“
340	350	0	0	100	“
350	360	0	0	100	“

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Depth Range (feet)		PERCENTAGES			COMMENTS
		uncon*	dis*	consolidated	
		gravel ⁺	crystals	igneous	
360	370	0	0	100	“
370	380	0	0	100	green and white-gray phaneritic plutonic rock composed of K-spar, quartz, biotite, chlorite; trace hematite and magnetite; trace epidote; monzogranite?; some iron oxide; slightly calcareous
380	390	0	0	100	“
390	400	0	0	100	“ no iron oxide
400	410	0	0	100	“
410	420	0	0	100	“
420	430	0	0	100	“ gray, black, and green white
430	440	0	0	100	“
440	450	0	0	100	“ gray white, black, and green
450	460	0	0	100	“
460	470	0	0	100	“ non calcareous
470	480	0	0	100	“
480	490	0	0	100	“
490	500	0	0	100	“
500	510	0	0	100	“
510	520	0	0	100	“
520	530	0	0	100	“
530	540	0	0	100	“
540	550	0	0	100	“

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Depth Range (feet)		PERCENTAGES			COMMENTS
		uncon*	dis*	consolidated	
		gravel ⁺	crystals	igneous	
550	560	0	0	100	“
560	570	0	0	100	gray-black, white, and minor green phaneritic plutonic rock composed of K-spar, quartz, biotite, and minor chlorite; noncalcareous; monzogranite?
570	580	0	0	100	“ trace pyrite
580	590	0	0	100	“ no pyrite
590	600	0	0	100	“
600	610	0	0	100	“
610	620	0	0	100	“
620	630	0	0	100	“
630	640	0	0	100	“
640	650	0	0	100	“
650	660	0	0	100	“
660	670	0	0	100	“
670	680	0	0	100	“
680	690	0	0	100	“
690	700	0	0	100	“
700	710	0	0	100	“
710	720	0	0	100	“ trace iron oxide and white powdery chips
720	730	0	0	100	“
730	740	0	0	100	“

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Depth Range (feet)		PERCENTAGES			COMMENTS
		uncon*	dis*	consolidated	
		gravel ⁺	crystals	igneous	
740	750	0	0	100	“
750	760	0	0	100	gray-black, white, and minor green phaneritic plutonic rock composed of feldspar, quartz, biotite, and minor chlorite; trace epidote?; noncalcareous; monzogranite?
760	770	0	0	100	“
770	780	0	0	100	“
780	790	0	0	100	“
790	800	0	0	100	“ trace gray limestone (xenolith?); slightly calcareous
800	810	0	0	100	“ white-green and gray; trace pyrite
810	820	0	0	100	“
820	830	0	0	100	“
830	840	0	0	100	“
840	850	0	0	100	“
850	860	0	0	100	“
860	870	0	0	100	“
870	880	0	0	100	“
880	890	0	0	100	“
890	900	0	0	100	“
900	910	0	0	100	“
910	920	0	0	100	“

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Depth Range (feet)		PERCENTAGES			COMMENTS
		uncon*	dis*	consolidated	
		gravel ⁺	crystals	igneous	
920	930	0	0	100	“
930	940	0	0	100	gray, black, white, and minor green phaneritic plutonic rock composed of feldspar, quartz, biotite, and minor chlorite; slightly calcareous; monzogranite?; trace gray limestone (xenolith?)
940	950	0	0	100	“
950	960	0	0	100	“ trace powdery white chips
960	970	0	0	100	“
970	980	0	0	100	“
980	990	0	0	100	“
990	1000	0	0	100	“
1000	1010	0	0	100	“
1010	1020	0	0	100	“
1020	1030	0	0	100	“
1030	1040	0	0	100	“
1040	1050	0	0	100	“
1050	1060	0	0	100	“ trace pyrite
1060	1070	0	0	100	“ no pyrite
1070	1080	0	0	100	“
1080	1090	0	0	100	“
1090	1100	0	0	100	“
1100	1110	0	0	100	“

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Depth Range (feet)		PERCENTAGES			COMMENTS
		uncon*	dis*	consolidated	
		gravel ⁺	crystals	igneous	
1110	1120	0	0	100	gray, black, white, and minor green phaneritic plutonic rock composed of feldspar, quartz, biotite, and minor chlorite; slightly calcareous; monzogranite?; trace pink igneous rhyolite fragment (chips from above or xenolith?)
1120	1130	0	0	100	“
1130	1140	0	0	100	“
1140	1150	0	0	100	“
1150	1160	0	0	100	“
1160	1170	0	0	100	“
1170	1180	0	0	100	“
1180	1190	0	0	100	“ trace pyrite
1190	1200	0	0	100	“
1200	1210	0	0	100	“
1210	1220	0	0	100	“
1220	1230	0	0	100	“
1230	1240	0	0	100	“
1240	1250	0	0	100	“
1250	1260	0	0	100	“
1260	1270	0	0	100	“

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